

# Work Order ID 70959

Monday, June 20, 2011 11:21:08 AM

ASAP



Item ID: D2003-037A

Accept



Setup Start



Revision ID:

Stop



Item Name: Tube Assembly-8J

Start Date: 6/20/2011 Start Qty: 1.00



Cust Item ID:

Required Date: 6/24/2011 Req'd Qty: 1.00



Customer:

Reference:

Run Start



Approvals: Process Plan: W Date: \_\_\_\_\_ Tooling: \_\_\_\_\_ Date: \_\_\_\_\_

Stop



QC: \_\_\_\_\_ Date: \_\_\_\_\_ SPC (Y/N): \_\_\_\_\_ Date: \_\_\_\_\_

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
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Draw Nbr	Revision Nbr
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D2003	Rev U/R
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100

0.00



Small Fab

Memo

24.61" 6/20/22

0.00

Small Fab

1- Cut tubing 24.61" long

2- Form tube as per dwg D2003-037A

3-Cut fire sleeve as per dwg D2003-037A

4-install sleeve nut and fire sleeve, flare ends as per dwg

5-install label with heat shrink

5/11/2022

110

QC5- Inspect part completeness to step on W/O

0.00



QC

Memo

0.00

Quality Control

5/11/2022

XL

**Work Order ID 70959**

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Item ID: D2003-037A

Accept

Setup Start

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Stop

Item Name: Tube Assembly-8J

Start Date: 6/20/2011 Start Qty: 1.00

Required Date: 6/24/2011 Req'd Qty: 1.00

Cust Item ID:

Customer:

Reference:

Approvals:

Process Plan:

Date:

Tooling:

Date:

Run Start

QC:

Date:

SPC (Y/N):

Date:

Stop

Sequence ID/  
Work Center IDOperation  
DescriptionSet Up/  
Run Hours

Tool ID

Tool #

Plan  
CodeAccept  
QtyReject  
QtyReject  
NumberInsp.  
Stamp

120

Identify as per dwg & Stock Location: SK

0.00



Packaging

Memo

0.00

Packaging

u 11.06.22

(1)

QC 21 -

11/6/22 JG

u 11.06.22

# Picklist Print

Monday, June 20, 2011 11:21:05 AM

Page 1

Work Order ID: 70959

Parent Item: D2003-037A

Parent Item Name: Tube Assembly-8J

Start Date: 6/20/2011


Required Date: 6/24/2011

Start Qty: 1.00

Required Qty: 1.00


Comments: IPP revA 11.06.20 new issue EC verified by:DD

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
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AN818-8J  Nut		Purchased	No			100	Each	6.0000	2	2		11/06/22	
---	--	-----------	----	--	--	-----	------	--------	---	---	--	----------	--


Location	Loc Qty	Loc Code
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ST332	6	
114365	6	

D3158-045  Heat Shrink		Manufactured	No			100	Each	3.0000	1	1		11/06/22	
--	--	--------------	----	--	--	-----	------	--------	---	---	--	----------	--


Location	Loc Qty	Loc Code
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ST402A	3	
38592	3	

M2650-6  Firesleeve-crkl .375IDia		Purchased	No			100	f	56.0000	2	2		11/06/22	
--	--	-----------	----	--	--	-----	---	---------	---	---	--	----------	--

Location	Loc Qty	Loc Code
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ST420A	56	
112195	26	
114341	30	

M304TR0.375W.035  304 TUBING .375 x .035w		Purchased	No			100	f	24.2500	2	2		11/06/22	
---	--	-----------	----	--	--	-----	---	---------	---	---	--	----------	--

Location	Loc Qty	Loc Code
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MAT016	24.25	
110113	14.25	
112950	10	

117598

2

# Picklist Print

Monday, June 20, 2011 11:21:05 AM

Page 2

Work Order ID: 70959

Parent Item: D2003-037A

Parent Item Name: Tube Assembly-8J

Start Date: 6/20/2011

Required Date: 6/24/2011

Start Qty: 1.00

Required Qty: 1.00

MS20819-8J

Purchased

No

100

Each

13.0000

2

2



SP 11/06/22

Sleeve

Location

Loc Qty

Loc Code

ST323

13

112933

13

2

Monday, June 20, 2011 11:21:06 AM

Shop Packet Print

Page 2

## WORK ORDER CHANGES

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: D2003-037A PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes ☒ No ☐ DQA: D Date: 07/12/20  
 QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

## WORK ORDER NON-CONFORMANCE (NCR)

NCR: <u>70959</u>		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			
07.12.11	6.0	PART TO BE 1" LONGER THAN TEMPLATE. (LONGER ON END AFTER SHARPER BEND)	LE 07.12.11	ACCEPTABLE	LE 07.12.11	✓ Holly	LE 07.12.11	✓ 07/12/11
11.06.22	6	MAKE PART 1" LONGER ON END AFTER SHARP BEND	OP 11.06.22 OS/042	ACCEPTABLE STOCK AS D2003-037A	n/a	✓ 11/06/22	OP 11.06.22 OS/042	✓ 11/06/22

NOTE: Date &amp; initial all entries



DESIGN <i>JE</i>	DRAWN BY <i>SP</i>	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
CHECKED <i>JE</i>	APPROVED <i>SP</i>	DRAWING NO. D2003	REV. B SHEET 1 OF 2
DATE 99.06.08		TITLE 206 CABIN HEATER TUBE ASSEMBLIES NTS	
A	90.04.09	NEW ISSUE	
B	99.06.08	UPDATE PER TEMPLATES; ADD P/N'S; 0.025 TUBING NOW 0.035 (TSR1049)	

RELEASED  
49.06.03 KE

UNDER REVIEW

06.03.21 CB

some flat  
lengths wrong

P/N	TEMPLATE	HEATSLEEVE LENGTH <sup>1</sup>	CUT LENGTH OF TUBE <sup>2</sup>	MS20819-8J SLEEVE	AN818-8J NUT	MS20819-8D SLEEVE	AN818-8D NUT	MS20819-6D SLEEVE	AN818-6D NUT	DESC.	MATERIAL <sup>4/8/7</sup>	VENDOR OR SPEC
D2003-001	T2003-001	5.2	6.00					2	2	TUBE ASS'Y	6061-T6 0.375 OD x 0.035 W	WWW-T-700/6
D2003-003	T2003-003	7.3	8.12					2	2	TUBE ASS'Y	6061-T6 0.375 OD x 0.035 W	WWW-T-700/6
D2003-005	T2003-005	9.8	10.62					2	2	TUBE ASS'Y	6061-T6 0.375 OD x 0.035 W	WWW-T-700/6
D2003-007	T2003-007	20.0	19.63					2	2	TUBE ASS'Y	6061-T6 0.375 OD x 0.035 W	WWW-T-700/6
D2003-009	T2003-009	12.38	12.44					2	2	TUBE ASS'Y	6061-T6 0.375 OD x 0.035 W	WWW-T-700/6
D2003-011	T2003-011	33.31	32.38					2	2	TUBE ASS'Y	6061-T6 0.375 OD x 0.035 W	WWW-T-700/6
D2003-013	T2003-013	12.7	13.54					2	2	TUBE ASS'Y	6061-T6 0.375 OD x 0.035 W	WWW-T-700/6
D2003-015	T2003-015	17.2	18.00					2	2	TUBE ASS'Y	6061-T6 0.375 OD x 0.035 W	WWW-T-700/6
D2003-017	T2003-017	17.0	16.25					2	2	TUBE ASS'Y	6061-T6 0.375 OD x 0.035 W	WWW-T-700/6
D2003-019	T2003-019	9.8	10.62			2	2			TUBE ASS'Y	6061-T6 0.500 OD x 0.035 W	WWW-T-700/6
D2003-021	T2003-021	N/A	2.25			2	2			TUBE ASS'Y	6061-T6 0.500 OD x 0.035 W	WWW-T-700/6
D2003-023	T2003-023	4.5	5.33			2	2			TUBE ASS'Y	6061-T6 0.500 OD x 0.035 W	WWW-T-700/6
D2003-025	T2003-025	9.8	10.60			2	2			TUBE ASS'Y	6061-T6 0.500 OD x 0.035 W	WWW-T-700/6
D2003-027	T2003-027	7.25	7.38			2	2			TUBE ASS'Y	6061-T6 0.500 OD x 0.035 W	WWW-T-700/6
D2003-029	T2003-029	17.2	18.00			2	2			TUBE ASS'Y	6061-T6 0.500 OD x 0.035 W	WWW-T-700/6
D2003-031	T2003-031	14.6	15.38	2	2					TUBE ASS'Y	CRES 0.500 OD x 0.035 W	AISI 304
D2003-033	T2003-033	29.75	29.62	2	2					TUBE ASS'Y	CRES 0.500 OD x 0.035 W	AISI 304
D2003-035	T2003-035	24.7	27.00	2	2					TUBE ASS'Y	CRES 0.500 OD x 0.035 W	AISI 304
<del>D2003-037</del>	<del>T2003-037</del>	<del>24.81</del>	<del>24.81</del>	<del>2</del>	<del>2</del>	<del>24.81</del>	<del>24.81</del>	<del>2</del>	<del>2</del>	<del>TUBE ASS'Y</del>	<del>CRES 0.500 OD x 0.035 W</del>	<del>AISI 304</del>
D2003-039	T2003-039	34.0	34.00	2	2					TUBE ASS'Y	CRES 0.500 OD x 0.035 W	AISI 304
D2003-041	T2003-041	6.0	5.88	2	2					TUBE ASS'Y	CRES 0.500 OD x 0.035 W	AISI 304
D2003-043	T2003-043	11.7	10.75	2	2					TUBE ASS'Y	CRES 0.500 OD x 0.035 W	AISI 304
D2003-045	T2003-045	3.50	2.44	2	2					TUBE ASS'Y	CRES 0.500 OD x 0.035 W	AISI 304
D2003-047	T2003-047	5.56	5.56	2	2					TUBE ASS'Y	CRES 0.500 OD x 0.035 W	AISI 304
D2003-049	T2003-049	33.2	34.00	2	2					TUBE ASS'Y	CRES 0.500 OD x 0.035 W	AISI 304
D2003-077	T2003-077	N/A	6.25							JET	6061-T6 0.375 OD x 0.035 W	WWW-T-700/6
D2003-101	T2003-101	13.25	13.13					2	2	TUBE ASS'Y	6061-T6 0.375 OD x 0.035 W	WWW-T-600/6
D2003-103	T2003-103	12.38	12.00					2	2	TUBE ASS'Y	6061-T6 0.375 OD x 0.035 W	WWW-T-600/6
D2003-105	T2003-105	10.75	10.60					2	2	TUBE ASS'Y	6061-T6 0.375 OD x 0.035 W	WWW-T-600/6
D2003-107	T2003-107	12.75	12.25					2	2	TUBE ASS'Y	6061-T6 0.375 OD x 0.035 W	WWW-T-600/6
D2003-109	T2003-109	8.25	8.125			2	2			TUBE ASS'Y	6061-T6 0.500 OD x 0.035 W	WWW-T-600/6
D2003-111	T2003-111	4.75	4.625			2	2			TUBE ASS'Y	6061-T6 0.500 OD x 0.035 W	WWW-T-600/6
D2003-116	T2003-116	4.0								HEATSLEEVE	M2650-20 CRINKLE-SOFT	STRATOFLEX
D2003-120	T2003-120	4.0								HEATSLEEVE	M2650-16 CRINKLE-SOFT	STRATOFLEX
D2003-14	T2003-14	4.0								HEATSLEEVE	M2650-14 CRINKLE-SOFT	STRATOFLEX
D2003-16	T2003-16	4.0								HEATSLEEVE	M2650-16 CRINKLE-SOFT	STRATOFLEX
D2003-205	T2003-205	9.75	9.60					2	2	TUBE ASS'Y	6061-T6 0.375 OD x 0.035 W	WWW-T-700/6
D2003-207	T2003-207	3.75	3.75					2	2	TUBE ASS'Y	6061-T6 0.375 OD x 0.035 W	WWW-T-700/6



DESIGN <i>[Signature]</i>	DRAWN BY <i>[Signature]</i>	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
CHECKED <i>[Signature]</i>	APPROVED <i>[Signature]</i>	DRAWING NO. D2003	REV. B SHEET 2 OF 2
DATE 99.06.08		TITLE 206 CABIN HEATER TUBE ASSEMBLIES NTS	

RELEASED  
99.06.09 KE

UNDER REVIEW

06.08.21 CB  
Some flat lengths  
~~and~~ wrong

Notes:

- (1) USE STRATOFLEX M2650-6 CRINKLE-SOFT HEATSLEEVE.
- (2) TUBING ASSEMBLIES TO BE CUT AND BENT IN ACCORDANCE WITH TEMPLATES.
- (3) TUBES TO BE FLARED 30° TO MATE WITH FITTINGS MADE TO MS33514.
- (4) ENSURE SEAMLESS TUBING IS USED.
- (5) INSTALL HEATSLEEVE OVER ALL TUBES WITH A DESIGNATED LENGTH OF HEATSLEEVE PER THE PARTS LIST.
- (6) 5052 (VV-T-700/4) TUBING MAY BE SUBSTITUTED WHEN 6061 TUBING IS NOT AVAILABLE.
- (7) 0.049 WALL THICKNESS CRES TUBING MAY BE SUBSTITUTED WHEN 0.035 IS NOT AVAILABLE.
- (8) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED.

